

REMARKS

The Final Office Action of April 9, 2003 has been considered. In view of the above amendments and following remarks, entry of the above amendments and reconsideration is respectfully requested.

Applicants submit the above amendments do not raise new matter, as support for the amendments may be found in the application as originally filed. Support for the amendments to claims 1, 14, and 20 may be found in original claim 17 and on page 7, lines 3-5. Claim 18 has been amended to correct dependency in view of the present cancellation of claim 17. Applicants additionally assert the above amendments do not raise new issues for searching, as the subject matter of the amendments has already been fully searched by the Examiner. The "up to 0.5% magnesia" limitation of claim 17 has been incorporated into the independent claims. Applicants therefore submit entry of the above amendments is proper and respectfully request the same. Applicants further assert that the above amendments do not raise indefiniteness issues under 35 U.S.C. § 112. According to M.P.E.P. § 2173.05(c) (II), it has been held that a composition claimed to have a theoretical content greater than 100% was not indefinite simply because the claims may be read in theory to include compositions that are impossible in fact to formulate. In re Kroekel, 504 F. 2d 1143 (CCPA 1974).

The Examiner has rejected claims 1-16 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Prochazka et al. in view of Yamamoto et al. and Scott, Jr. et al. Applicants have considered the rejections and will attempt to respond, but the Examiner's rejections are unclear. For example, on page 3, first full paragraph, the Examiner refers to Scott, Jr. et al. and Scott et al. when discussing the rejections of claims 6-13 and 19. There are at least two Scott et al. references listed in the IDS, neither of which was earlier referenced by the Examiner when stating the references on which the rejections are based. Applicants are unsure whether the reference to Scott, et al. is an inadvertent error, resulting in the omission of the "Jr." or if the rejection is referencing a Scott patent. No guidance is given and Applicants therefore respectfully request clarification if the present remarks are unpersuasive.

In response to the previous Non-Final Office Action, Applicants attempted to respond to the mislabeled rejections and respectfully requested clarification. The Final Office Action does not provide the requested clarification and thus places an undue burden on the Applicants. If the present remarks are deemed nonresponsive or unpersuasive, Applicants request the finality of Office Action be removed and clarification of the rejections be provided to allow the Applicants time to more fully respond to the clarified rejections. In the alternative, Applicants respectfully request the time for reply to the Final Office Action be restarted on the mailing date of the clarified Office Action. Early notice to that effect is requested.

Applicants respectfully traverse the 35 U.S.C. § 103(a) rejections of claims 1-16 and 19 over Prochazka in view of Yamamoto and Scott, Jr. The Examiner has stated it would have been obvious to one of ordinary skill to make use of starting material containing about 99.9% alumina in the Prochazka densifying process and polish the resulting translucent ceramic body with molten inorganic flux. Applicants assert that such a combination is not only unobvious, but would not result in the presently claimed invention.

The Prochazka densifying process is directed to the formation of optically translucent ceramic bodies consisting of mullite. The Examiner states it would have been obvious to use the starting material of Yamamoto in the process of Prochazka because both utilize isostatic pressure in their processes. Applicants assert that even if this were done, the resultant process and product would not result in the present invention, in which a resultant arctube includes about 99.9% alumina and up to about 0.5% MgO (claims 1 and 14).

Applicants further assert it would not be obvious to include MgO in the process or product of claims 1 and 14 because Yamamoto expressly teaches away from using MgO in an arctube with a high alumina content (column 3, lines 53-68). The Examiner states (in his later rejection of claims 17 and 18) that it would have been obvious to include up to about 0.5% MgO in view of Rhodes. Rhodes, however, is directed to an yttria based body, not an alumina based body. Because the Yamamoto reference expressly teaches away from the claimed composition, there is no motivation to combine the MgO of Rhodes with the composition of Yamamoto and the process of

Prochazka and Scott, Jr., and claims 1-16 and 19 are thus not obvious. Applicants respectfully request the § 103(a) rejections be withdrawn.

Claims 17 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentably over Prochazka in view of Yamamoto and Scott, Jr., and further in view of Rhodes et al. and Curtis Scott et al. Applicants respectfully traverse.

The rejection of claim 17 is moot, as claim 17 has been canceled in this amendment. A further discussion of the rejection in view of Rhodes is thus deemed unnecessary.

Applicants respectfully submit the '871 patent to Curtis Scott is not prior art under 35 U.S.C. §103(a) due to the provisions of 35 U.S.C. § 103(c). The '871 patent and the present application were copending applications, qualifying the '871 patent as prior art only under 35 U.S.C. §102(e), and were both subject to an obligation to assignment to General Electric at the time of invention. The '871 patent is therefore disqualified as prior art for 35 U.S.C. §103(a) purposes by 35 U.S.C. §103(c). Applicants respectfully request withdrawal of the rejection of claim 18.

The Examiner has rejected claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Scott, Jr. et al. (4,690,727) in view of Prochazka and Yamamoto. The Examiner then explains the rejection with reference to Scott, Jr. et al. (4,033,743). Due to the subject matter of the explanation and the fact that Scott, Jr. is not an inventor of the '727 patent, Applicants believe the rejection is over the '743 patent and will respond accordingly. If this assumption is erroneous, Applicants respectfully request the finality of the rejection be withdrawn, allowing the Applicants an opportunity to more fully respond to the rejections.

Applicants respectfully traverse the rejection of claim 20. None of the cited references suggest the inclusion of up to 0.5% MgO as required by the language of claim 20. Moreover, as previously discussed, Yamamoto expressly teaches away from such inclusion in an alumina-based arctube body. The invention is thus not obvious and Applicants respectfully request withdrawal of the § 103(a) rejection.

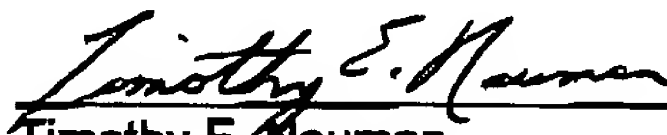
In view of the above, Applicants submit the present application is in condition for allowance and respectfully request the rejections be withdrawn.

Applicants hereby request a telephone interview to discuss the subject matter of this response if the response is deemed unpersuasive.

It is believed that no fees are due in relation to this response. If, however, any additional fees are due, Applicants authorize deduction of that fee from Deposit Account Number 06-0308.

Respectfully Submitted,

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